## United States Environmental Protection Agency Region 10 1200 Sixth Avenue Seattle, Washington 98101

## AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 <u>et seq.</u>, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act", the

## The City of Skagway, Alaska Wastewater Treatment Plant

is authorized to discharge from a facility located at **Skagway, Alaska** (latitude 59° 26′ 54.8″; longitude 135° 19′ 36.6″:)

to receiving waters named Taiya Inlet,

in accordance with the discharge point, effluent limitations, monitoring requirements and other conditions set forth herein and

in accordance with the specific limitations, monitoring requirements, management practices, and other conditions set forth herein.

This permit shall become effective October 1, 2002.

This permit and the authorization to discharge shall expire at midnight, September 7, 2007.

Signed this 6<sup>th</sup> day of August, 2002

//S//

Randall F. Smith

Director

Office of Water, Region 10

U.S. Environmental Protection Agency

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## I. SPECIFIC LIMITATIONS AND REQUIREMENTS

## A. Effluent Limitations

- 1. During the effective period of this permit, the permittee is authorized to discharge from outfall 001, subject to the restrictions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application, or any pollutants that are not ordinarily present in such waste streams.
- 2. There shall be no discharge of floating solids, visible foam, or oily wastes which produce a sheen on the surface of the receiving water.
- 3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
- 4. The dissolved oxygen (D.O.) shall not be less than 2.0 mg/L nor greater than 17 mg/L.

5. The following effluent limits shall apply at all times:

Table 1. EFFLUENT LIMITATIONS			
Effluent Parameter	Unit of Measurement	Monthly Average	Maximum Daily
Five-Day Biochemical Oxygen	mg/L	140	200
Demand (BOD <sub>5</sub> ), May 1 - September 30	lbs/day	740	1050
Five-Day Biochemical Oxygen	mg/L	80	100
Demand (BOD <sub>5</sub> ), October 1 - April 30	lbs/day	420	530
Total Suspended Solids (TSS)	mg/L	140	200
May 1 - September 30	lbs/day	740	1050
Total Suspended Solids (TSS)	mg/L	70	88
October 1 - April 30	lbs/day	370	460
Total Flow	mgd	0.53	0.63
Fecal Coliform Bacteria	colonies/100 mL	$1.0 \times 10^6$	$1.5 \times 10^6$
Total Compania	μg/L	150	210
Total Copper <sup>1,2</sup>	lbs/day	0.8	1.1
Tracel Desiring 1 Chilesian 1	μg/L	120	240
Total Residual Chlorine <sup>1</sup>	lbs/day	0.6	1.3

<sup>1</sup> Reporting is required within 24-hours if the maximum daily limitation is violated (see Part II.G.).

<sup>2</sup> Metal limitation expressed as total recoverable metal.

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6. Removal Requirements for BOD<sub>5</sub> and TSS: The monthly average effluent concentration must not exceed 70 percent of the monthly average influent concentration.

Percent removal of  $BOD_5$  and TSS must be reported on the Discharge Monitoring Reports (DMRs). For each parameter, the monthly average percent removal must be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month. Influent and effluent samples must be taken over approximately the same time period.

### B. Monitoring Requirements

#### 1. Overview

The permittee shall implement the plant influent/effluent, water quality, biological, and toxics control monitoring programs as described below. The primary objectives of these programs are as follows:

- Determine compliance with the National Pollutant Discharge Elimination System (NPDES) permit
- Determine compliance with State water quality criteria
- Aid in assessing water quality at discharge point
- Characterize toxic substances
- Monitor plant performance
- Determine compliance with the regulatory criteria of Section 301(h) of the Clean Water Act
- Determine level of bacteria concentration in nearshore waters
- Monitor for changes in sediment quality
- Provide data for evaluating reissuance of this permit

#### 2. Annual Reporting

In addition to the monthly Discharge Monitoring Report (DMR) required under Part II.C. of this permit, an annual written report, covering the previous calendar year, shall be submitted to Environmental Protection Agency (EPA) by January 10 of each year. The annual report shall contain summaries of the receiving water quality monitoring data, and any biological monitoring if required in the previous year. In addition to summarizing the data, the permittee shall also evaluate and interpret data in relation to the magnitude and ecological significance of observed changes in the parameters measured. Potential changes in water quality, sediment chemistry, and biological parameters over time and with distance from the

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outfall, shall be addressed. All reports will address compliance with water quality standards by using appropriate descriptive and statistical methods to test for and to describe any impacts of the effluent on water quality.

## 3. Influent and Effluent Monitoring Requirements

During the effective period of this permit, the following monitoring requirements shall apply:

Table 2. INFLUENT/EFFLUENT MONITORING REQUIREMENTS			
Effluent Parameter <sup>1</sup>	Sample Location	Sample Frequency	Sample Type
Average Monthly Flow, mgd	influent or effluent	continuous	recorder
BOD <sub>5</sub> , mg/L	influent & effluent <sup>2</sup>	2/month	24-hour composite
Total Suspended Solids (TSS), mg/L	influent & effluent <sup>2</sup>	2/month	24-hour composite
pH, s.u.	effluent	1/week	grab
Temperature, °C	effluent	1/week	grab
Dissolved Oxygen (DO), mg/L	effluent	1/week	grab
Total Residual Chlorine, μg/L <sup>3</sup>	effluent	1/week	24-hour composite
Fecal Coliform Bacteria, colonies/100ml	effluent	1/month	grab
Total Copper, µg/L	effluent	1/month	24-hour composite
Chronic Whole Effluent Toxicity (WET), TU <sub>c</sub>	effluent	1/permit term <sup>4</sup>	24-hour composite
Toxic Pollutants and Pesticides	effluent	1/permit term <sup>5</sup>	priority pollutant scan

#### Notes:

- If the discharge concentration falls below the method detection limit (MDL), the permittee shall report the effluent concentration as "less than {numerical MDL}" on the DMR. Actual analytical results shall be reported on the DMR when the results are greater than the MDL. For averaging, samples below the MDL shall be assumed equal to zero. The permittee shall report the number of non-detects for the month in the "comments section" of the DMR.
- Influent and effluent sampling is required. Samples shall be collected during the same 24-hour period. The percent BOD<sub>5</sub> and TSS removal shall be reported on each monthly DMR.
- Monitoring is only required during period when disinfection process is in use.
- 4 Monitoring required during the first year of the permit. Monitoring shall be performed during the summer season, May 1 through September 30. See Part I.C.
- Monitoring is only required during the 4<sup>th</sup> year of the permit. Monitoring shall be performed during the summer season, May 1 through September 30.

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Influent and effluent monitoring results shall be reported monthly as specified in Part II.C. (Reporting of Monitoring Results).

## 4. Receiving Water Quality Monitoring Requirements

The permittee shall implement the receiving water quality monitoring program as described in Table 3. Using standard monitoring and quality control procedures (Part II.B. Monitoring Procedures) the following parameters shall be measured at the locations, depths, and frequency described in Table 3 below: turbidity, dissolved oxygen, pH, salinity, temperature, secchi disk depth, and fecal coliform. The zone of initial dilution (ZID) is a column of water centered over the outfall diffuser with a radius of 139 feet and depth equal to the water column. The fecal coliform mixing zone is defined as a circle of 1600 meter radius, centered on the outfall line and over the diffuser and extending from the marine bottom to the surface.

Receiving water quality monitoring shall be reported on the annual report (Part I.B.2).

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Table 3. RECEIVING WATER QUALITY MONITORING			
Parameter	Depth	Station Locations	Monitoring Frequency
Turbidity, nephelometric turbidity units (NTU),  Dissolved oxygen, mg/L, pH, s.u.	surface, mid- depth, and bottom	1)within the ZID 2)on boundary of ZID 3)on boundary of ZID opposite from station 2 4)reference site at least 200 m from the ZID and at the same depth as the	Once in the summer <sup>1</sup> during the 2 <sup>nd</sup> and 4 <sup>th</sup> year of permit and once
Salinity, ppt, Temperature, °C	every 3 m	discharge 5)reference site at least 200 m from the ZID and 100 m from station 4 and at the same depth as the	in the winter during the 3 <sup>rd</sup> year of the permit
Secchi disk depth	surface only	discharge	
Fecal coliform <sup>2</sup> , #/100ml	surface only	1) shoreline area of human use close to the outfall 2) shoreline area just outside of where the mixing zone touches the shoreline 3) just outside of the open ocean edge of the mixing zone 4) Shoreline area of human use inside the mixing zone	Once a month in April, June, July, August, September, and November <sup>3</sup>

- One grab sample required per station. Outside the mixing zone the fecal coliform concentrations shall not exceed a monthly average of 14 FC/100 mL, and a daily maximum of 43 FC/100 mL. Also, fecal coliform concentrations shall not exceed 200 FC/100 ML at the shoreline within the designated mixing zone.
- If fecal coliform receiving water concentrations do not exceed those listed in note 2 above during the first two years of monitoring, the monitoring frequency may be reduced to once per year. If the frequency is reduced, fecal coliform monitoring shall be conducted on the same day as receiving water monitoring for other parameters during the subsequent years of the permit.

## 5. Biological Monitoring for Benthic Infauna and Sediment Analyses

Sediment analyses for total volatile solids (TVS) and a benthic survey shall be conducted in August of the fourth year of the permit.

a. Sampling for TVS and benthic fauna

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Sediments from the following five locations shall be sampled and measured for TVS and benthic fauna:

- within the ZID.
- two stations on the boundary of the ZID, at opposite sides,
- two reference stations in opposite directions from the outfall. The reference stations shall be at the same depth as the outfall and shall be representative of the sediment type generally found in areas unaffected by the discharge. These reference stations shall be at least 200 m from the discharge and 100 m from each other.

Sampling stations shall be established using an electronic navigational aid and, to the extent possible, sampling shall occur at the same stations which were sampled during the previous survey (August 1999).

b. Sample collection for TVS and benthic infauna

At each sampling station one benthic sample and two TVS samples shall be collected. TVS core samples shall be taken adjacent to the samples for benthic fauna.

c. Biological monitoring reports for TVS and benthic infauna

The biological monitoring report for TVS and benthic infauna shall be submitted to EPA Region 10 by January 10 of the year following sampling along with the receiving water annual report (Part I.B.2.). The report shall include: a map of the sampled locations that also shows the outfall and the ZID; detailed field observations of the biological and sediment conditions at all of the sampled stations (including, but not limited to, the numerically dominant species, the approximate number of individuals of each species, differences in appearance of surface sediments at the locations sampled, etc.); notes regarding sampling procedures, number of samples collected, and location where the samples were collected; and, results of the benthic community and TVS analyses from each location.

- 6. Monitoring Program Plan including Quality Assurance Requirements
  - a. Within 120 days of the effective date of this permit, the permittee shall develop a Monitoring Program Plan that includes a Quality Assurance/Quality Control (QA/QC) program. This plan shall address the details of:

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i. all monitoring procedures (e.g., methods to insure adequate preservation of composite samples, methods of station location and relocation, identification of sampling equipment),

- ii. monitoring objectives,
- iii. specific QA/QC procedures including the method detection limits and precision requirements that will insure that program objectives are met,
- iv. how data will be used to evaluate the monitoring objectives,
- v. name(s), address(es), and telephone number(s) of the laboratories, used by or proposed to be used by the permittee, and
- vi. other activities designed to achieve data quality goals for the monitoring programs.
- b. The document, *Guidance for Preparation of Quality Assurance Project Plans*, EPA, Region 10, Quality and Data Management Program, QA/G-5, may be used as a reference guide in preparing the QA/QC program. This document is available at www.epa.gov/r10earth/offices/oea/qaindex.htm.
- c. The permittee shall amend the Monitoring Program Plan whenever there is a modification in the sample collection, sample analysis, or other conditions or requirements of the plan.
- d. Copies of the Monitoring Program Plan shall be kept on site and shall be made available to EPA and ADEC upon request.
- C. Whole Effluent Toxicity Testing Requirements.

The Permittee shall conduct chronic toxicity testing for determining the toxicity of the effluent from outfall 001 in accordance with subsections 1-7 below. Testing shall be conducted once per year in the first year of the permit term. Monitoring shall be conducted during the summer season of May 1 through September 30.

- 1. The Permittee shall conduct chronic toxicity testing on 24-hour composite effluent with one of the following organisms:
  - a. Sand dollar (Dendraster excentricus)
  - b. Green, purple or red sea urchin
    (Strongylocentrotus droehbachiensis, Strongylocentrotus purpuratus, Strongylocentrotus franciscanus, respectively)
  - c. Pacific oyster (<u>Crassostrea gigas</u>)

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## d. Bay mussel (Mytilus edulis)

Species shall be selected based on availability of organisms in spawning condition.

The presence of chronic toxicity shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*. EPA/600/R-95/136, August 1995.

Results shall be reported in TUc (chronic toxic units). TUc = 100/No Observed Effect Concentration (NOEC) in percent effluent concentration.

### 2. Toxicity Trigger

Chronic toxicity testing requirements are triggered when the NOEC equals or exceeds 72 TUc. When chronic toxicity testing requirements are triggered, the permittee shall comply with the requirements set out in Parts 5 and 6 below.

### 3. Quality Assurance

- a. A series of five dilutions and a control shall be tested. The series shall include the receiving water concentration (RWC), 1.4 percent effluent, two dilutions above the RWC, and two dilutions below the RWC.
- b. If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient.
- c. If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria (TAC) as specified in the test methods manual, then the permittee must re-sample and re-test as soon as possible.
- d. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity test (i.e., same test duration, etc.).
- e. Control and dilution water shall be laboratory water as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water shall also be used.

  Receiving water may be used as control and dilution water upon

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notification of EPA. In no case shall water that has not met test acceptability criteria be used as dilution water.

- f. Chemical testing for the parameters listed in Part I.A. of this permit shall be performed on a split sample collected for WET testing. To the extent that the timing of sample collection coincides with that of the sampling required in Part I.A. of this permit, chemical analysis of the split sample will fulfill the requirements of Part I.A.
- 4. Preparation of Initial Investigation Toxicity Reduction Evaluation (TRE)

Prior to initiation of the toxicity testing required by this permit, the permittee shall submit to EPA a copy of the permittee's initial investigation TRE workplan. This plan shall describe the steps the permittee intends to follow in the event that toxicity testing requirements as described in Part I.C.2. above, are triggered, and should include at a minimum:

- a. A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;
- b. A description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility; and
- c. If a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or other).

#### 5. Accelerated testing

- a. If chronic toxicity testing requirements as defined in Part I.C.2. above are triggered, the permittee shall implement the initial investigation workplan. If implementation of the initial investigation workplan indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If toxicity is detected in this test, then the following paragraph (C.5.b.) shall apply.
- b. If chronic toxicity testing requirements as defined in Part I.C.2. above are triggered, and toxicity is detected in the test required under Part I.C.5.a. above, then the permittee shall conduct six more tests, bi-weekly (every two weeks), over a twelve-week period.

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Testing shall commence within two weeks of receipt of the sample results of the exceedance

#### 6. Toxicity Reduction Evaluation (TRE)

- a. If chronic toxicity, as defined Part I.C.2., is detected in any of the six additional tests required under Part I.C.5.b., then, in accordance with the permittee's initial investigation workplan and EPA manual EPA 833-B-99-002 (Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants), the permittee shall initiate a TRE within fifteen (15) days of receipt of the sample results of the exceedance. The permittee will develop as expeditiously as possible a more detailed TRE workplan, which includes:
  - i. further actions to investigate and identify the cause of toxicity;
  - ii. actions the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
  - iii. a schedule for these actions.
- b. The permittee may initiate a toxicity identification evaluation (TIE) as part of the overall TRE process described in the EPA acute and chronic TIE manuals EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).
- c. If none of the six tests required under Part I.C.5.b. above indicated toxicity, then the permittee may return to the normal testing frequency.
- d. If a TIE is initiated prior to completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.

#### 7. Reporting:

- Results of toxicity tests, including any accelerated testing conducted during the month, shall be reported on the Discharge Monitoring Report (DMR) for the month in which the tests are conducted.
- b. The full report shall be submitted by the end of the month in which the DMR is submitted.

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c. The full report shall consist of: (1) the toxicity test results; (2) the dates of sample collection and initiation of each toxicity test; (3) the flow rate at the time of sample collection; and (4) the results of the effluent analysis for chemical parameters required for the outfall as defined in Part I.A. of the permit.

d. Test results for chronic tests shall be reported according to the chronic manual chapter on Report Preparation.

## D. Nonindustrial Source Control Program

- 1. The permittee shall review and if necessary update its public education program. Print and/or electronic media may be used in addition to, or instead of, pamphlets. The program shall address such issues as:
  - development and distribution of information containing nonhazardous alternatives to hazardous household products and pesticides.
  - proper disposal of hazardous wastes including disposal guidelines specifying what toxic pollutants can and cannot be discharge to the sewer system.
- 2. This information shall be distributed to the public at a minimum by the following dates:

Advertisement in local newspaper:	June 15 of alternate years starting with year one after permit issuance	
Distribution of public education pamphlets to citizens:	June 15 of alternate years starting with year two after permit issuance	
Public education program information shall be made available to all new service connections.		

3. A report shall be submitted annually with the December DMR summarizing the actions undertaken during the previous year to control nonindustrial sources of toxic pollutant and pesticides (including, but not limited to, the activities outlined above).

#### E. Shoreline Sign

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The Permittee shall place a sign on the shoreline near the mixing zone and outfall line. The sign should state that treated domestic wastewater is being discharged, the name and owner of the facility and the approximate location and size of the mixing zone. The sign should inform the public that certain activities, such as the harvesting of shellfish for raw consumption and bathing should not take place in the mixing zone and give a contact number for additional information.

### F. Operation and Maintenance Plan

- 1. Within 180 days after the effective date of this permit, the permittee shall review/develop and implement its operation and maintenance (O&M) plan and ensure that it includes appropriate best management practices (BMPs); the plan must be reviewed annually thereafter. BMPs include measures that prevent or minimize the potential for the release of pollutants to Taiya Inlet. The O&M Plan shall be retained on site and made available to EPA and ADEC upon request.
- 2. The permittee shall develop a description of pollution prevention measures and controls appropriate for the facility. The appropriateness and priorities of controls in the O&M Plan shall reflect identified potential sources of pollutants at the facility. The description of BMPs shall address, to the extent practicable, the following minimum components:
  - Spill prevention and control;
  - Optimization of chemical usage;
  - Preventive maintenance program;
  - Minimization of pollutant inputs from industrial users;
  - Research, develop and implement a public information and education program to control the introduction of household hazardous materials to the sewer system; and
  - Water conservation.

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## II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS

A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under Part I shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee shall collect additional samples whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee shall analyze the additional samples for those parameters limited in Part I.A. of this permit that are likely to be affected by the discharge.

The permittee shall collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples shall be analyzed in accordance with paragraph II.B ("Monitoring Procedures"). The permittee shall report all additional monitoring in accordance with paragraph II.D ("Additional Monitoring by the Permittee").

- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit or alternate methods have been approved by the EPA Water Office Director.
- C. Reporting of Monitoring Results. Monitoring results shall be summarized each month on the DMR form. The reports shall be submitted monthly and are to be postmarked by the 10th day of the following month. Legible copies of these, and all other reports, shall be signed and certified in accordance with the requirements of Part IV.H. Signatory Requirements, and submitted to the Director, Office of Water and the State agency at the following addresses:

original to: United States Environmental Protection Agency

Region 10

NPDES Compliance Unit 1200 Sixth Avenue, OW-133 Seattle, Washington 98101

(206) 553-1280 fax

copy to: Alaska Department of Environmental Conservation

Division of Air and Water Quality

State Discharge Permit & Certification Plan Program

410 Willoughby Avenue Suite #303

Juneau, AK 99801-1795

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D. Additional Monitoring by the Permittee. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.

Upon request by the Director, the permittee must submit results of any other sampling, regardless of the test method used.

- E. Records Contents. Records of monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements,
  - 2. The individual(s) who performed the sampling or measurements,
  - 3. The date(s) analyses were performed,
  - 4. The individual(s) who performed the analyses,
  - 5. The analytical techniques or methods used, and
  - 6. The results of such analyses.
- F. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time. Data collected on-site, copies of DMRs, and a copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location.
- G. Twenty-four Hour Notice of Noncompliance Reporting
  - 1. The following occurrences of noncompliance shall be reported to EPA and ADEC by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
    - a. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G. Bypass of Treatment Facilities),

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b. Any upset which exceeds any effluent limitation in the permit (See Part III.H. Upset Conditions), or

- c. Violation of a maximum daily discharge limitation for those toxic or hazardous pollutants identified within Table1 of Section I.A.
- 2. A written submission shall also be provided to EPA and ADEC within five days of the time that the permittee becomes aware of the circumstances.

  The written submission shall contain:
  - a. A description of the noncompliance and its cause,
  - b. The period of noncompliance, including exact dates and times,
  - c. The estimated time noncompliance is expected to continue if it has not been corrected, and
  - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 3. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846.
- 4. Reports shall be submitted to the addresses in Part II.C. Reporting of Monitoring Results.
- H. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.C. are submitted. The reports shall contain the information listed in Part II.E.
- I. Inspection and Entry. The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:
  - 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit,
  - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit,

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3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

#### III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

#### B. Penalties for Violations of Permit Conditions

1. Civil and Administrative Penalties. Any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall be subject to a civil or administrative penalty, not to exceed the maximum amounts authorized by Sections 309(d) and 309(g) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note).

#### 2. Criminal Penalties

- a. Negligent Violations. Any person who negligently violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(1) of the Act.
- b. Knowing Violations. Any person who knowingly violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(2) of the Act.
- c. Knowing Endangerment. Any person who knowingly violates a permit condition implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or

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serious bodily injury, shall, upon conviction, be subject to a fine and/or imprisonment as specified in Section 309(c)(3) of the Act.

- d. False Statements. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall, upon conviction, be punished by a fine and/or imprisonment as specified in Section 309(c)(4) of the Act.
- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize, or prevent, any discharge, or sludge use or disposal, in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed, or used, by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances. Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

## G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section.

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#### 2. Notice

a. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass.

b. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.G. Twenty-four Hour Notice of Noncompliance Reporting.

#### 3. Prohibition of Bypass

- a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:
  - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under paragraph 2 of this section.
- b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determined that it will meet the three conditions listed above in paragraph 3.a. of this section.

#### H. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

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2. Necessary upset demonstration conditions. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the cause(s) of the upset,
- b. The permitted facility was at the time being properly operated,
- c. The permittee submitted notice of the upset as required under Part II.G. Twenty-four Hour Notice of Noncompliance Reporting, and
- d. The permittee complied with any remedial measures required under Part III.D. Duty to Mitigate.
- 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

## IV. GENERAL REQUIREMENTS

- A. Notice of New Introduction of Pollutants
  - 1. The permittee shall provide adequate notice to the Director, Office of Water, and ADEC of:
    - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to sections 301 or 306 of the Act if it were directly discharging those pollutants, and
    - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.
  - 2. For the purposes of this section, adequate notice shall include information on:
    - a. The quality and quantity of effluent to be introduced into such treatment works, and

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b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

- B. Planned Changes. The permittee shall give notice to the Director and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. Notice is also required when the alteration or addition results in a significant change in the permittee's sludge use or disposal practices, including notification of additional use or disposal sites not reported during the permit application process.
- C. Anticipated Noncompliance. The permittee shall give advance notice to the Director and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- D. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- E. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit. The application shall include an updated industrial user survey and priority pollutant scan.
- F. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- G. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director or ADEC, it shall promptly submit such facts or information.
- H. Signatory Requirement. All applications, reports or information submitted to the Director and ADEC shall be signed and certified.

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1. All permit applications shall be signed as follows:

- a. For a corporation: by a responsible corporate officer.
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
- c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.
- 2. All reports required by the permit and other information requested by the Director or ADEC shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Director and ADEC, and
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the organization.
- 3. Changes to authorization. If an authorization under Part IV.H.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.H.2. must be submitted to the Regional Administrator and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.
- I. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware

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that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- J. Availability or Reports. Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Director. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private infringement of federal, state, or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to a new permittee if:
  - 1. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date,
  - 2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them, and
  - 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the Act.
- O. Reopener Provision. This permit is subject to modification, revocation and reissuance, or termination at the request of any interested person (including the permittee) or upon EPA initiative. However, permits may only be modified, revoked or reissued, or terminated for the reasons specified in 40 CFR Parts 122.62, 122.63 or 122.64, and 40 CFR Part 124.5. This includes new information

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which was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance and includes, but is not limited to, future monitoring results. All requests for permit modification must be addressed to the EPA in writing and shall contain facts or reasons supporting the request.

#### V. DEFINITIONS

"Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

"Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

"Biosolids" means any sludge or material derived from sludge that can be beneficially used. Beneficial use includes, but is not limited to, land application to agricultural land, forest land, a reclamation site or sale or give away to the public for home lawn and garden use.

"Chronic toxicity" measures a sublethal effect (e.g., reduced growth, reproduction) in an effluent or ambient waters compared to that of the control organisms.

"Chronic toxic unit (TU<sub>c</sub>)" is a measure of chronic toxicity. The number of chronic toxic units in the effluent is calculated as 100/NOEC, where the NOEC is measured in percent effluent.

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

A "Grab" sample is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.

"Inhibition concentration (IC)" is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., the EPA Interpolation Model).

" $IC_{25}$ " means the estimated toxicant concentration that would cause a 25 percent reduction in a nonlethal biological measurement of the test organisms, such as reproduction or growth.

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"Maximum daily discharge limitation" means the highest allowable "daily discharge".

"Method detection limit (MDL)" is the minimum concentration of an analyte that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero as determined by a specific laboratory method (40 CFR 136).

"No observed effect concentration (NOEC)" is the highest concentration of toxicant to which organisms are exposed in a chronic test, that causes no observable adverse effect on the test organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significant different from controls.)

"Pathogen" means an organism that is capable of producing an infection or disease in a susceptible host.

"Pollutant," for the purposes of this permit, is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could, on the basis of information available to the Administrator of the EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Sewage sludge" means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in a Treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the incineration of sewage sludge or grit and screenings generated during preliminary treatment of domestic sewage in a Treatment Works. These must be disposed of in accordance with 40 CFR 258.

A "24-hour composite" sample shall mean a flow-proportioned mixture of not less than eight discrete aliquots. Each aliquot shall be a grab sample of not less than 100 mL and shall be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.

A "TRE" is a site-specific study conducted in a stepwise process to narrow the search for effective control measures for effluent toxicity.

"Toxic pollutants" are those substances listed in 40 CFR 401.15.

"Pesticides" are Demeton, Guthion, Malathion, Mirex, Methoxychlor and Parathion (as listed in 40 CFR 125.58).

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"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

The "ZID" is the Zone of Initial Dilution. The ZID is defined by the volume of water centered over the outfall diffuser with a radius of 139 feet and the depth equal to that of the water column above that area.